TITLE 326 AIR POLLUTION CONTROL BOARD

SECOND NOTICE OF COMMENT PERIOD
#98-235(APCB)

DEVELOPMENT OF NEW RULES CONCERNING EMISSIONS OF NITROGEN OXIDES

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) is soliciting public comment on new rules that would control emissions of nitrogen oxides from Indiana sources. IDEM seeks comment on the affected citations listed and any other provisions of Title 326 that may be affected by this rulemaking.

HISTORY

First Notice of Comment Period: November 1, 1998, Indiana Register (22 IR 553).

CITATIONS AFFECTED: 326 IAC 10; 326 IAC 21-1-1.

AUTHORITY: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11.

SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING

Background

In July 1997, the U.S. EPA published a new health standard for ozone, one (1) of the most prevalent urban summertime pollutants. Recent air quality monitoring data show that seven (7) urban areas in Indiana are at significant risk of not meeting the new health standard. On October 27, 1998, after a three (3) year public process to consider options for addressing the interstate transport of ozone, the Administrator of the U.S. EPA published a final federal rule (63 FR 57356) that requires each of twenty-two (22) states in the eastern United States, including Indiana, to reduce its emissions of nitrogen oxides significantly by 2007. Nitrogen oxides are one (1) precursor to ozone formation. The federal rule is intended to reduce the transport of ozone and ozone causing pollutants that occurs in this multi-state region.

The purpose of this rulemaking is to develop a suite of nitrogen oxides emission limitations that will improve air quality within Indiana and reduce any significant contribution by Indiana to ozone violations in other states.

Indiana has worked aggressively to improve air quality in regions of the state where citizens breathe unhealthy air. The state has indicated its clear commitment to meet the revised ozone health standard established by the U.S. EPA in 1997 and has formed and is working with ozone steering committees made up of citizens, businesses and local officials in seven (7) key areas to develop local clean air plans. Indiana has also worked with the U.S. EPA and other states to identify practical, cost-effective approaches to addressing ozone transport. In addition, since early 1999, IDEM has been meeting with sources of nitrogen oxides emissions and other interested parties to discuss approaches and technologies for reducing nitrogen oxides emissions and the many issues associated with this significant control program.

To date, IDEM has held three (3) public meetings in Indianapolis and one (1) in northwest

Indiana to discuss the requirements of the final federal rule and options that IDEM may use in the development of Indiana rules. These meetings have been in addition to discussions at regularly scheduled regional steering committee meetings. IDEM will continue to hold meetings to discuss the rulemaking and the rule requirements as the rule is being developed.

Based on all the technical information available, IDEM believes that significant reductions of nitrogen oxides emissions will be necessary to reduce both in-state and interstate ozone, and that control of nitrogen oxides will be one (1) element of the clean air plans for "at risk" areas. IDEM also believes that there are cost-effective means of nitrogen oxides control available that will provide not only ozone benefits, but other environmental benefits as well.

The purpose of this notice is to solicit comments on the nature of the rule and nitrogen oxides budget plan that should be developed for submission to the U.S. EPA in response to its October 27, 1998 final rule and for ultimately meeting the ozone health standard across Indiana.

Summary of federal rule

The final federal rule requires each state to meet a nitrogen oxides budget by 2007. U.S. EPA determined the budget by calculating the expected emissions from all sources of nitrogen oxides (point, mobile, and area) and applying controls to certain industrial categories where, in U.S. EPA's judgement, cost-effective controls are available. Those categories are electric utilities, large industrial boilers, internal combustion engines over a certain size, and cement kilns.

Indiana's budget for the 2007 ozone season is two hundred two thousand five hundred eighty-four (202, 584) tons, a thirty-six percent (36%) decrease from the emissions that would be expected without the controls assumed by U.S. EPA. The U.S. EPA has requested comment on corrections to the budget inventories and may revise the budget after their review of the corrections.

The federal rule is clear that states may use any mix of control measures to attain the budget and may require reductions from categories other than the ones identified by U.S. EPA for control.

Summary of Indiana Emission Sources and Control Options

Indiana's nitrogen oxide emissions come from a variety of large and small, stationary and mobile sources. With input from the public and Indiana sources, IDEM has carefully reviewed the inventory and identified those source categories where controls could be required, based on information about available technology. In most cases, there is a range of reduction that could be required. For stationary sources, controls could be applied to a range of size of sources. There are measures that would apply to mobile sources, such as cleaner fuels or vehicle inspection and maintenance programs.

Below is a table showing the range of options currently under discussion. The first column identifies a source category that could be controlled. Not all categories or sources in the inventory would be required to control nitrogen oxides emissions. The second column shows what U.S. EPA assumed the 2007 emissions would be for each of the identified categories; under the federal rule, the first four (4) categories would be required to reduce their emissions. The third column shows the range of control identified by IDEM and the associated range of emissions expected in 2007. The fourth column show the difference between U.S. EPA's assumptions for

that category and the range of control options Indiana has identified. In some cases there is a shortfall compared to U.S. EPA's assumptions; in other cases IDEM has included an option that provides additional reductions.

Category	2007 EPA SIP Call Budget (tons/season) (percent control)	Emissions Budget under IDEM Proposal (tons/season) (percent control)	Difference between SIP Call and IDEM Proposal (tons/season)
Stationary – Point			
Utility boilers (EGUs)+	49,020 (64%)	49,020 to 80,104 (64% - 41%)	0 to +31,084
Large: Industrial boilers >250MMBtu+	12,902 (60%)	11,369 to 18,947 (61% - 35%)	-1,533 to +6,040
Internal combustion engines > 1 ton+*	1,021 (90%)	1,021 to 2,551 (90% - 70%)	0 to +1,530
Cement kilns > 1 ton+*	3,407 (30%)	3,894 to 3,407 (20% - 30%)	0 to +487
Small: Industrial boilers ≤250MMBtu	7,703 (0%)	3,081 to 5,007 (60% - 35%)**	-4,622 to -2,696
Internal combustion engines < 1 ton*	3,634 (0%)	363 to 2,907 (90% - 20%)**	-3,271 to -727
Other sources > 100 tons/season	3,774 (0%)	2,642 to 3,397 (30% - 10%)**	-1,132 to -377
Refinery process heaters ≥80MMBtu	822 (0%)	99 to 411 (88% - 50%)**	-723 to -411
Mobile			
Highway I/M	60,694 (0%)	51,428 to 60,694*** (15% - 0%)	-9,266 to 0***
Low sulfur fuel			
Nonroad	22,445 (0%)	22,445 (0%)	0
Stationary – Area	25,544 (0%)	25,544 (0%)	0
Total	190,966++	170,906 to 225,414	-20,547 to +34,930

+ source category regulated under federal rule
++ total does not include emissions from certain uncontrolled source categories
* per ozone season day
** IDEM could chose not to control these categories consistent with U.S. EPA SIP call
*** includes reductions from both control options combined

Summary of Draft Rule

The draft rule contained in this second notice lays out a preliminary approach to a nitrogen oxides control program. It focuses on several categories of stationary sources. In some cases, a range or several specific alternatives are provided, to reflect the options still under discussion. As more technical information is developed, those alternatives can be narrowed and refined. The following information is provided to assist with understanding different alternatives that are being considered and the different emissions reductions that are associated with the alternatives. Since the rule is targeting nitrogen oxides and ozone formation that normally occurs during the summer months of May through September, the budget and associated control measures are only applicable during the ozone season.

Key Policy Issues and Questions

This rulemaking raises many important policy issues. A number of those are listed here, and IDEM specifically seeks input on them. Other issues are identified in the section by section analysis at the end of this introduction.

The agency specifically requests comment on the overall goals of this rulemaking:

- to establish a budget consistent with the total NO_x emissions allocated by the U.S. EPA in its October 1998 final notice; or

- to establish a budget to address NO_x emissions contribution to nonattainment of the one (1) hour and eight (8) hour ozone health standards in Indiana; or

- to establish a budget based on the minimal NO_x reductions needed to reduce Indiana's contribution to other states' ozone nonattainment to an insignificant level; or

- to establish a NO_x budget considering all or some of the above, taking into account the cost-effectiveness of different control options.

IDEM also specifically solicits comments, regardless of which approach is taken, on the range of options included within each of the different categories of sources:

- Utility boilers and turbines serving electric generators with a capacity greater than twenty-five (25) megawatts (electricity generating units) - IDEM has included a range of control that would limit nitrogen oxides emissions to between fifteen one-hundredths (0.15) pound per million British thermal units and twenty-five one-hundredths (0.25) pound per million British thermal units. The budget for this source category in the final federal rule was based on the fifteen one-hundredths (0.15) limitation. See 326 IAC 10-2-1(a)(1)

- Large industrial boilers with a heat input of greater than two hundred and fifty million (250,000,000) British thermal units per hour - IDEM has included a range of control that would limit nitrogen oxides emissions to between fifteen one-hundredths (0.15) pound per million British thermal units and twenty-five one-hundredths (0.25) pound per million British thermal units. The budget for this source category in the final federal rule was based on a limitation of seventeen one-hundredths (0.17). See 326 IAC 10-2-1(a)(2)

- Internal combustion engines - The final federal rule included an emissions budget for this source category that was based on an average of ninety percent (90%) control across the region. The proposed federal implementation plan would require specific emissions limits

on certain types and sizes of engines. IDEM has included a proposed requirement that the engines identified in the federal implementation plan reduce emissions in a range of seventy percent (70%) to ninety percent (90%). Smaller engines could be required to comply with a reduction between twenty percent (20%) and ninety percent (90%) or IDEM could defer to the federal rule and not control or require reductions from these sources. See 326 IAC 10-2-1(a)(4) and 326 IAC 10-2-1(a)(5)

- Portland cement kilns - The final federal rule required that cement kilns install a specific type of control technology or achieve an equivalent emissions reduction of thirty percent (30%). IDEM has included the control technology installation as an option, but other alternatives are presented that would require controls to achieve a twenty percent (20%) to thirty percent (30%) emissions reduction. See 326 IAC 10-2-1(a)(6)

- Small industrial boilers with a heat input of less than or equal to two hundred and fifty million (250,000,000) British thermal units per hour - The final federal rule did not require emissions reductions from these sources. IDEM has included this category as a possible option and has proposed that these source make reductions between thirty-five percent (35%) and sixty percent (60%). IDEM could defer to the federal rule and not control or require reductions from these sources. See 326 IAC 10-2-1(a)(3)

- Process heaters located at petroleum refineries with a heat input of less than or equal to eighty million (80,000,000) British thermal units per hour - The final federal rule did not require emissions reductions from these sources. IDEM has included this category as a possible option and has proposed that these source make reductions between fifty percent (50%) and eighty-eight percent (88%). IDEM could defer to the federal rule and not control or require reductions from these sources. See 326 IAC 10-2-1(a)(7)

- Other sources of nitrogen oxides emissions with projected uncontrolled emissions greater than one hundred (100) tons per ozone season in 2007 - There are other major sources of nitrogen oxides in Indiana with significant emissions An option included in the draft rule would require these sources to reduce nitrogen oxides emissions by a certain percentage. The range or emissions reduction in the rule is between ten percent (10%) and thirty percent (30%). IDEM could defer to the federal rule and not control or require reductions from these sources. See 326 IAC 10-2-1(a)(8)

- Mobile sources - The table of alternatives includes possible reductions from mobile sources. Inspection and maintenance programs are already being implemented in Lake, Porter, Clark, and Floyd counties. There could be an option to implement inspection and maintenance programs in other areas to provide nitrogen oxides emissions reductions. IDEM has not included this control measure in the draft rule. Information has also been provided for low sulfur gasoline. This option is being discussed on the federal level and the U.S. EPA is evaluating the reduction of sulfur levels in gasoline as part of other mobile source control measure rulemaking. When the program is implemented on the federal level, the emissions budget for Indiana will be readjusted and IDEM would not be able to take credit for the reductions.

- Other options - As part of the rulemaking, IDEM could establish a site-specific emissions budget for each utility or source that takes into account the overall capacity factor of the unit, its future projected use, identified limitations in the availability of technology and other factors. IDEM is continuing to evaluate area sources to determine if reductions are

available from this source category.

- Compliance options - The final federal rule included a model trading program that would be used by utilities and large industrial boilers to reduce the cost of compliance with the nitrogen oxides limitations and budgets. IDEM has identified additional source categories that could be included in the nitrogen oxides reduction program. While some sources might wish to participate in a trading program, others may choose not to or may not be eligible. IDEM has included compliance options that would seek to reduce the compliance costs for these sources or source categories as well. The compliance options include emissions averaging. See 326 IAC 10-2-5

The final list of control measures that IDEM includes in rule to be adopted by the Air Pollution Control Board will determine the amount of emissions reductions that will be achieved and Indiana's nitrogen oxides emission budget. If the overall goal of the rulemaking is to be consistent with the final federal rule and options or alternatives are included that do not match the reductions sought in the final federal rule, IDEM will have to obtain other emissions reductions to make up for any shortfall.

IDEM has been working to provide air quality modeling data that reflects implementation of different options and the resulting impact on ozone levels. The air quality modeling data will be used to identify those options that will allow IDEM to meet the goals of the rulemaking. IDEM will also be using the modeling data to work with the local steering committees to assess the impact of these options as well as possible local measures on each of the seven (7) local areas.

Other Issues

There are several other issues worth noting as part of this background to the rule. First, the U.S. EPA's nitrogen oxides reduction rule has been challenged in the D.C. Circuit Court of Appeals. The State of Indiana has joined that challenge. Along with the challenge on the merits, the petitioners have asked the court to delay the September 1999 submittal date required under the federal rule. If that challenge results in changes in the substantive requirements or delays the submittal or implementation schedule, IDEM and the public will need to evaluate the impact on this state rulemaking.

The second issue concerns the timing of this rulemaking. The U.S. EPA's final rule requires submittal of compliant state plans by September 1999. The U.S. EPA has indicated it will implement its nitrogen oxides control program in any state that has not submitted an approvable plan by that date. IDEM has been moving forward expeditiously with the state rulemaking process, while assuring that there are opportunities for public discussion. IDEM anticipates bringing a draft rule to the Air Pollution Control Board for preliminary adoption in August. A formal public comment period would follow, with final adoption anticipated in the fall or winter of 1999. The legal challenge may affect this schedule, as noted above.

The third issue is the proposed federal implementation plan that was published in the Federal Register on October 21, 1998. If Indiana or another affected state does not have a rule or rules that respond to the final federal rule by September 30, 1999, the U.S. EPA has stated that a final federal implementation plan will be promulgated as expeditiously as possible to achieve the reductions and the Indiana nitrogen oxides emissions budget. The U.S. EPA will also implement a federal implementation plan in the event that Indiana or another affected state submits a rule or rules by September 30, 1999, but the U.S. EPA finds that the rule or rules will not provide for the

emissions reductions needed by the compliance dates in the final federal rule. The promulgation of the federal implementation plan will also begin the sanctions procedures under the Clean Air Act that could impact funding and new source review requirements in nonattainment areas.

Section by Section Rule Discussion

IDEM has included draft rule language for two (2) new rules and amendments to one (1) current rules to address the regional transport of nitrogen oxides and the contribution of nitrogen oxides to Indiana's "at risk" areas. The new rules include a nitrogen oxides reduction program that requires emissions reductions of specific source categories or emission units and a nitrogen oxide emission trading program that may be used to assist with complying with the nitrogen oxides reduction program. The draft rule language also includes amendments to 326 IAC 21 to incorporate revisions to the acid rain rules for monitoring of nitrogen oxides emissions. An outline of the rule and rule requirements follows:

New rule, 326 IAC 10-2, Regional Nitrogen Oxide Reduction Program

This rule contains emission limits for various source categories in order to create nitrogen oxide emission reductions within Indiana and to address regional transport of ozone. The rule includes monitoring, record keeping, and reporting requirements for demonstrating compliance with the rule and documentation of the emissions reductions. In some cases, IDEM has included a range of values, rather than one (1) individual value. The range represents comments or suggestions that IDEM has received during discussions with the regulated community or information received from other states that are subject to the final federal rule.

326 IAC 10-2-1, Applicability

This section identifies those sources or source categories that are subject to the rule requirements. The department has included sources identified in the federal rulemaking under this section. These sources are electric generating units with a capacity greater than twenty-five (25) megawatts, large boilers with a heat capacity greater than two hundred fifty million (250,000,000) British thermal units per hour, various sizes and types of large, stationary internal combustion engines, and cement kilns. The department has included draft rule language that would expand the applicability by including boilers with a heat capacity equal to or less than two hundred fifty million (250,000,000) British thermal units per hour and expanding the range of stationary internal combustion engine sizes. The draft rule includes refinery process heaters greater than or equal to eighty million (80,000,000) British thermal units per hour. An additional category, large nitrogen oxides emissions sources, has been included for sources that are not described above, but with nitrogen oxides emissions greater than one hundred (100) tons per ozone season. This section also provides the affected sources with an identification of the various rule sections that apply to each source type or category.

The department requests comments on the source categories and units that have been identified in this section, including appropriate thresholds that could be established to exempt sources or categories that would not be cost-effective to control. An example would be exempting small boilers less than one hundred million (100,000,000) British thermal units per hour.

326 IAC 10-2-2, Definitions

This section provides definitions of terms used in this rule.

326 IAC 10-2-3, Emission limits

This section describes the specific emissions limit that a particular unit or source must meet. In this draft, the limits are expressed as ranges; in the final rule, a specific limit for each category of source will be established.

For electricity generating units and large non-electricity generating boilers, the limit or limitation range is expressed as pounds of nitrogen oxides allowed per British thermal unit. For small boilers, stationary internal combustion engines, nitrogen oxides emissions units at large nitrogen oxides sources, and cement kilns, a range of emissions reductions in terms of percent reduction is proposed. Small boilers would be required to meet a thirty-five percent (35%) to sixty (60%) reduction. Larger stationary internal combustion engines would meet a reduction of seventy percent (70%) to ninety percent (90%) and it is proposed that smaller stationary internal combustion engines reduce emission between twenty percent (20%) and ninety percent (90%). For cement kilns, several options are presented. The options include a limitation expressed as a type of control equipment to be used, an alternative control technique that reduces nitrogen oxide emissions equivalent to between twenty percent (20%) and thirty percent (30%), a limit expressed as an amount of nitrogen oxides per ton of clinker produced, or a limit based on best achievable control technology. Refinery process heaters would be required to reduce emissions between fifty percent (50%) and eighty-eight percent (88%). Nitrogen oxides emissions units at large nitrogen oxides sources would be required to reduce emissions between ten percent (10%) and thirty percent (30%).

The department requests comments on the limitations or percent reductions that are presented and the form in which the limitation is or should be expressed.

326 IAC 10-2-4, Compliance procedures

This section includes options for compliance with the emissions limitations in section 3. The compliance demonstration options include emissions averaging plans or the nitrogen oxides emissions trading program.

The department requests comment on the options presented.

326 IAC 10-2-5, Monitoring and testing

This section specifies the monitoring and testing requirements that will apply to the affected sources and units. The use of continuous emissions monitoring systems, or an accepted monitoring methodology, in accordance with 40 CFR 75 is proposed for use by electricity generating units and large boilers. Continuous emissions monitoring systems are also proposed for monitoring small boilers, nitrogen oxides emissions units at large nitrogen oxides sources, refinery process heaters and stationary internal combustion engines in accordance with 40 CFR 60, but there is an option for an alternative procedure upon approval by the IDEM. Cement kilns will be required to conduct stack testing for nitrogen oxides in accordance with 40 CFR 60 on an annual basis.

The department requests comments on the appropriateness of the monitoring options presented and possible options or alternatives that have not been included.

326 IAC 10-2-6, Record keeping and reporting

This section outlines the record keeping and reporting requirements concerning nitrogen oxide emissions and other information. Electricity generating units and large boilers will be required to provide information concerning monitoring plans and certification tests; monitoring data will be reported on a quarterly basis. Large stationary internal combustion engines, small boilers, refinery process heaters and nitrogen oxides emissions units at large nitrogen oxides sources will be required to maintain records on affected units and, if used, continuous emissions monitoring systems and to report nitrogen oxides emissions information for the ozone season on an annual basis. Cement kilns will be required to maintain information about the kilns and their operation and testing results and report emissions information for the ozone season on an annual basis.

New rule 326 IAC 10-3, Nitrogen Oxides Trading Program

This rule establishes an emissions trading program and includes applicability requirements, exemptions, standard requirements, permit requirements, allocation procedures, allowance tracking, monitoring requirements, reporting requirements, individual source opt-in procedures, and a compliance supplement pool of NO_x allowances. The rule is based on the federal model trading rule at 40 CFR 96 with certain exceptions. For the most part, the trading program would be administered by U.S. EPA, similar to the acid rain trading program currently in effect. The key responsibilities of the state agency under the trading program include:

- establishing initial emission allowances for sources participating in the program and reissuing allowances in future years;
- determining whether any allowances should be set aside for new sources and administering those allowances;
- administering the compliance supplement pool, which is an amount of extra allowances available only in 2003 and 2004 for sources that either make significant early reductions or cannot, despite all best efforts, meet the 2003 compliance deadline;
- conducting the necessary permitting activities;
- oversight of continuous monitoring systems;
- reviewing and either approving or denying requests by sources that wish to opt-in to the trading program.

Comment is requested on the draft trading rule in general and, in particular, where language differs from the federal rule.

326 IAC 10-3-1, Applicability

This section establishes criteria to determine the sources to be included in the trading program.

326 IAC 10-3-2, Definitions

This section provides definitions for use with the trading program rule.

326 IAC 10-3-3, Retired unit exemption

This section sets forth the requirements that must be met by a source that wants to have a unit or units exempted from the trading program. It includes emission prohibitions and permit requirements.

326 IAC 10-3-4, Standard requirements

This section sets out standard requirements concerning permits, monitoring, excess emissions, record keeping and reporting requirements, and liability.

326 IAC 10-3-5, Computation of time

This section establishes procedures to compute the beginning and ending of time periods and the effect of holidays and weekends on calculating time periods.

326 IAC 10-3-6, NO_x authorized account representative

This section establishes requirements to select an authorized account representative and an alternate authorized account representative. The section includes requirements for submittals, such as certifications, the information required for certificates of account representation, objection procedures, and procedures for changing account representatives and others.

326 IAC 10-3-7, Permit requirements

This section establishes NO_x budget permit requirements for sources in the trading program. Requirements include permit administration procedures, submittal dates for permit applications, requirements for a complete application, incorporation of allowance transfers, allocations, and deductions, effective dates, and permit revision procedures.

326 IAC 10-3-8, Compliance certification

This section sets forth the requirements for compliance certifications. This includes the date for submittal of certification reports, elements that must be included in the reports, the information required to be included in the certification by the authorized account representative and actions by the U.S. EPA and IDEM.

326 IAC 10-3-9, NO_x allowance allocations

This section establishes the procedures to be used by IDEM when allocating NO_x allowances to sources in the trading program. The section includes deadlines for IDEM to have completed allowance allocations, equations to be used when allocating allowances to electric generating units and non-electric generating units, the data to be used in the allocation equation, requirements for establishing set-aside allocations for new sources, and procedures for allocating allowances that remain in the set-aside accounts.

IDEM has the flexibility to alter certain provisions of this rule section and still receive a streamlined review by the U.S. EPA including the budget that is set for source categories to be subject to the trading program, the method of allocating allowances, and the establishment of

allowance set-asides.

Under section 9(a), the amount of the nitrogen oxides budget represents the budget that reflects a range of control from fifteen one-hundredths (0.15) to twenty-five one-hundredths (0.25) pound per million British thermal units.

Under section 9(c), IDEM has included three (3) options for allowance allocations. A one (1) year allocation that is completed three (3) years prior to the applicable control period; a five (5) year allocation that is completed three (3) years prior to the applicable control periods; and a ten (10) year allocation that is completed five (5) years prior to the applicable control periods.

IDEM seeks comment on the proposed alternatives. A longer allocation period will provide more certainty for affected sources, but a shorter allocation period allows the department to make needed adjustments or changes in a timely manner.

Under section 9(d), IDEM has retained the new source set-aside provisions included with the final federal rule, except that the allocation of allowances to new sources would be based either on a default emissions rate or an allowable emissions rate. The amount of the set-aside would be five percent (5%) of each source category budget in 2003, 2004, and 2005 and two percent (2%) of each source category budget in 2006 and thereafter. (sections 9(d)(5)(C) and 9(e)).

IDEM seeks comment on the amount of the budget that should be allocated for a new source set-aside, if any. The department seeks comment on other possible options for distribution of the set-aside. For example, the set-aside could be used not only for new sources, but also for sources with special circumstances. IDEM could also establish an allowance set-aside for projects related to energy efficiency or renewable energy.

IDEM seeks comment on the provisions above as well as the following:

> **Should the heat input used for allowance allocations be based on an average value over several years or a maximum value from a single year? Basing the allocation on an average allows a source to account for low utilization in a given year. Basing the allocation on a single year would account for several years of low or abnormal utilization.**
>
> **Should the allocations be based on a formula using heat input data or should the allocations be based on output capacity? Heat input data is a generally known and available value, but may encourage increased utilization to maintain a steady level of allowances. Output capacity could provide more equity and could possibly provide an incentive for increased efficiency.**
>
> **Should the allocations be based on maximum rated capacity or a capacity factor? The capacity factor recognizes the historical utilization of the unit. The maximum capacity would recognize the maximum capability of the unit and not the historical use of the unit.**

<u>326 IAC 10-3-10, NO_x allowance tracking system</u>

This section sets forth the procedures to be used by the U.S. EPA to track NO_x allowance allocations, deductions, and transfers. The section includes procedures for establishing

compliance, overdraft, and general accounts. The procedures to be used by the U.S. EPA for deductions from compliance and overdraft accounts are included, as well as requirements concerning excess emissions. The section also includes provisions for emissions banking, flow control procedures to reduce the possibility that excess banked emissions could allow for increased emissions, and procedures for creating early reduction credits.

326 IAC 10-3-11, NO_x allowance transfers

This section outlines the procedures to be used by account holders to transfer NO_x allowances between accounts.

326 IAC 10-3-12, NO_x monitoring and reporting requirements

This section sets forth the requirements for monitoring units in the trading program to demonstrate compliance and the reporting and record keeping requirements for compliance data. Elements included under this section are compliance dates for required monitoring system installations, prohibited activities, certification and recertification requirements, alternatives for low mass emission units, reporting and record keeping requirements, and provisions for requesting alternative methodologies.

326 IAC 10-3-13, Individual opt-ins

This section establishes the procedures and requirements for a source that does not have a NO_x budget unit to opt into the trading program. The section includes application and permit requirements, allowance allocation procedures, provisions to create opt-in accounts, and procedures to allow an opt-in unit to withdraw from the trading program.

326 IAC 10-3-14, Allowance banking

The section establishes the ability for sources to bank, or retain, allowances that are not used in a current or previous year so that the allowances may be used in a future year to demonstrate compliance. The banking provisions include procedures to limit the amount of banked allowances that may be used in future years if the total amount of banked credits exceeds a threshold.

326 IAC 10-3-15, Compliance supplement pool

This section establishes a pool of NO_x allowances and procedures to allocate these allowances to sources that make emissions reductions earlier than required or that cannot implement control measures by the compliance date of May 1, 2003.

IDEM has the option to adopt one (1) of two (2) early reduction provisions under the final federal rule. One (1) option would only award early reduction credits if the source controls to a level below twenty-five one-hundredths (0.25) pound per million British thermal units and eighty percent (80%) of the unit's emission rate in the 2000 ozone season. The option in the draft rule only requires that a source controls emissions to level below any federal or state emission limitation applicable to the unit, and the section includes procedures, criteria and timing for creating early reduction credits to be used to extend the compliance date.

IDEM also has the option to distribute allowances directly to sources based on a demonstration of need. This would require that the source demonstrate to the department that it was not possible

to install control measures by the compliance deadline because of electricity reliability concerns, undue risk, the inability to generate early reduction credits, or the inability to purchase allowances from the market. The demonstration would have to be approved and go through a public process.

The allowances that IDEM distributes from the compliance supplement pool must be used by the sources in 2003 and 2004. After the 2004 ozone season, U.S. EPA will retire any allowances that have not been used by the sources.

IDEM seeks comment on the early reduction credit provisions and the appropriate use of the compliance supplement pool.

326 IAC 21, Acid Rain Provisions

This rule has been amended to incorporate changes by the U.S. EPA to the acid rain rules under 40 CFR 72 through 78. The changes subject NOx budget units under a trading program to the monitoring requirements under the acid rain program and include alternative monitoring provisions for low mass emissions units that burn natural gas or fuel oil.

SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD

IDEM requested public comment from November 1 1998, through December 1, 1998, on alternative ways to achieve the purpose of the rule and suggestions for the development of draft rule language. IDEM received comments from the following parties by the comment period deadline:

American Electric Power	(AEP)
American Portland Cement Alliance	(APCA)
Amoco Petroleum Products Refining Business Group	(APP)
Cinergy Corporation	(CIN)
Crawfordsville Electric Light and Power	(CLP)
Eli Lilly and Company	(ELC)
Essroc Italcementi Group	(ESS)
Hoosier Energy Rural Electric Cooperative, Incorporated	(HE)
Indiana Manufacturers Association	(IMA)
Indiana Municipal Power Agency	(IMPA)
Indiana Petroleum Council	(IPC)
Indiana Petroleum Marketers and Convenience Store Association	(IPM)
Indianapolis Power and Light Company	(IPL)
Lehigh Portland Cement Company	(LPC)
Marathon Ashland Petroleum LLC	(MAP)
Richmond Power and Light	(RPL)

Following is a summary of the comments received and IDEM's responses thereto.

General

Comment: Cement manufacturing is a specialized and unique process. Because of the idiosyncratic nature of cement kilns, a one-size-fits-all approach to emission reduction is not practical. Most of the existing nitrogen oxides (NO_x) control technologies were developed for power plants and other indirect combustion processes. In addition to the distinctions between cement kilns and boilers, each individual cement manufacturing system is a unique process. The

manufacturing process is highly variable, site specific, dependent on the type of equipment installed, and the raw materials that are used to make the product. Prescribing a specific NO_x control technology to cement manufacturing to achieve a standard reduction target does not work. In past efforts, most cement plants have had better success with process modifications rather than with low NO_x burners and other technological fixes. An effective and appropriate approach to cement plants would be to allow flexibility to determine what reductions can be realistically extracted at each plant and how those reductions can be achieved. (ESS)(APCA)(LPC)

Response: The agency agrees that the use of specific control technologies may not be the most effective approach in reducing NO_x emissions for a particular industry. IDEM has sought, and will continue to seek, information from possibly affected sources and source categories concerning achievable emissions reductions. The draft rule language that applies to the cement industry does allow for an alternative to specific control technologies.

Comment: The U.S. EPA's NO_x SIP call contains estimates for the cost-effectiveness of applying various control technologies to cement kilns. The cost-effectiveness of various technologies, as cited in the preamble to the final federal rule, are unrealistically low. The cost-effectiveness figures are based upon an Alternative Control Technology (ACT) document that was produced in 1994. Much of the supporting data used for the ACT document were produced even earlier and the document needs to be updated and based on more recent data and experiences. A final rule should not be based upon flawed assumptions and outdated information, such as those found in the ACT document. (ESS)(APCA)

Response: In the rulemaking process, IDEM will be requesting information from potentially affected sources to help determine the appropriate sources to be controlled, the amount of reductions each source category will be required to obtain and the costs of the reductions. IDEM's goal is to proceed with final rules that are based on the most current information and that reduce NO_x emissions as cost effectively as possible in an effort to improve air quality in Indiana and reduce any regional transport that may be occurring.

Comment: In the proposed federal implementation plan to reduce regional ozone transport, the U.S. EPA presents the option of applying for an alternative emission limit to small entity-owned cement plants that would be regulated under the proposed federal rule. Cement plants owned by small entities experience a relatively more significant impact from emission control expenditures, but the alternative emission limit approach makes sense for all cement plants given the questions concerning the U.S. EPA's assumptions on possible reductions and cost-effectiveness. Experience with the suggested control technologies and kilns in Indiana has not resulted in the emissions reduction or the cost-effectiveness estimates of the U.S. EPA. These results demonstrate the inaccuracy of the Alternative Control Technology (ACT) document, the variability of specific kiln systems, and the variability of NO_x reductions using the same technology at different kilns. A rigid approach might reduce competitiveness and product quality at many cement plants, while a tailored, flexible approach will maximize emission reductions and maintain the vigor of this necessary industry. (ESS)(APCA)

Response: IDEM agrees that a rigid one-size-fits-all approach may not achieve the emissions reductions that are being sought in the most cost-effective or common sense way. The agency will be working with affected sources to determine the most cost-effective means of reducing NO_x emissions to meet the new eight (8) hour standard and reduce transport.

Comment: It is understood that the portland cement manufacturing industry must fairly participate in the reduction of NO_x emissions from sources in Indiana in order to comply with the U.S. EPA NO_x SIP call and the following suggestions are offered. The required NO_x reductions

should be from uncontrolled emissions based on the peak daily NO_x emissions during the ozone season. The NO_x budget should be based on the controlled emissions based on the peak daily NO_x emissions after the implementation of the NO_x control measures. And finally, the cement manufacturing industry should fairly participate in the NO_x SIP call reductions by reducing NO_x from uncontrolled levels by either thirty percent (30%) or the amount achieved by implementing highly cost-effective control measures that would cost no more than two thousand ($2,000) dollars per ton of ozone season NO_x reduced. (ESS)

Response: The final federal rule establishes the budget that Indiana will have to comply with in 2007. The budget for the ozone season is based on the ozone season daily emissions. The ozone season daily emissions estimates are based on uncontrolled emissions taking into account the seasonal, weekday and weekend throughput or production. The emissions reduction efficiency achievable with the application of the reasonably available control technology was applied to the uncontrolled emissions to calculate the seasonal budget. Presently, the rule allows sources the flexibility to vary daily production so long as their seasonal budget is not exceeded. The agency is interested in achieving the maximum reductions needed for attainment of the new standard while recognizing costs associated with various control technologies. The emission limitations for the cement industry in the draft rule would allow a source to use a different technology that achieves the same emissions reductions as listed control technologies. Other alternatives may also be identified during on-going discussions concerning this rulemaking.

Comment: The U.S. EPA's baseline is flawed and information clarifying incorrect information will be submitted. There is concern about the application of the growth factor used to project uncontrolled NO_x emissions in 2007. The growth in the portland cement industry over the past several decades has occurred almost exclusively at existing locations, where the limestone needed to make cement is present. This trend is expected to continue in the foreseeable future. (LPC)

Response: The U.S. EPA has recognized some inaccuracies in the inventory data and has extended a comment period to address problems with the data. IDEM supplied corrected data to the U.S. EPA by the comment period deadline. IDEM will continue to receive as much information as possible from affected sources during this rulemaking with the goal of adopting a final rule that is based on accurate and current information, including realistic growth factors.

Comment: IDEM should be clear about what the agency is trying to accomplish with this rulemaking, that is, comply with the new requirements promulgated by the U.S. EPA. The new state rules should explain on their face that they set forth standards for the state to comply with the U.S. EPA requirements. The clarity is important for several reasons. Several petitions for review have been filed in federal court to challenge the U.S. EPA's action. If the challenges are successful, sources should not be forced to pursue litigation in state court to sort out the portions of state rules that relied on U.S. EPA standards. The clarity is also important to avoid creating confusion and false expectations. With the promulgation of the final federal rules, the agency faces a very limited range of options. Unless IDEM is clear about the purpose of the rulemaking, it is likely that the public, or even members of the Air Pollution Control Board, will not understand the limited scope of the agency's discretion. Finally, IDEM should be clear about what the agency is doing to be faithful to its own determinations. Comments from the Governor and Commissioner, submitted in response to the U.S. EPA's proposed rule, were very critical of the proposed federal rules and the direction that U.S. EPA was taking. IDEM should not create the impression that the agency is walking away from its previous determinations and somehow endorsing the U.S. EPA's approach. The new state rules should thus be explicit that the rules implement federal requirements. The rules should include an effective date and language indicating that they will only be in effect as long as necessary to meet the federal requirements or

that the state rules will terminate if the federal rules are overturned. (IPL)(AEP)

Response: Although federal regulations normally include a paragraph concerning the purpose of the rule, this is generally not done with Indiana rules. The agency has made it clear in the background and purpose section in the First Notice of Comment Period and this notice that the agency does not agree that the extent of NO_x reductions required by the U.S. EPA is necessary to address any significant contribution Indiana has in other states. IDEM has also stated in different venues that the agency does believe that a substantial reduction of NO_x is required to assist with attaining the new ozone standard and to reduce any transport that may be occurring. This rulemaking is intended to achieve those reductions. As an alternative, IDEM believes that it is best to work with affected sources and the U.S. EPA in crafting a rule that accomplishes the goal of clean air in Indiana and reduced ozone transport. IDEM will continue discussing this issue with interested parties, but generally believes it is better policy to address NO_x reductions needed to attain clean air in Indiana and federal requirements with one (1) rulemaking. For these reasons, IDEM has not included the language requested by the commenters.

Comment: Some NO_x reductions from electric utilities and large industrial boilers are clearly appropriate. A leveling of the playing field for electric utilities has been endorsed by the utility industry that would establish a system-wide, annual average NO_x emission rate of thirty-five hundredths (0.35) pound per million British thermal units. IDEM has gone on record proposing a system-wide average of twenty-five hundredths (0.25) pound per million British thermal units and has determined that NO_x reductions below this amount would cause a substantial, and unjustified, cost to the electric utilities, without equivalent environmental benefit. While there is a disagreement as to which rate should be implemented, there is agreement that the fifteen hundredths (0.15) pound per million British thermal units is unjustified. (IPL)

Response: IDEM will be evaluating various emission rates to determine the most appropriate limitation to address attainment of the new standard and reducing ozone transport. The agency has stated previously that a rate of twenty-five hundredths (0.25) pound per million British thermal units limitation would address Indiana's contribution to downwind states. IDEM will continue to discuss with all interested parties the appropriate mix of NO_x reductions to be achieved through this rulemaking.

Comment: Efforts by IDEM to utilize the most cost-effective control measures available to the state are supported. During the Ozone Transport Assessment Group (OTAG) process, the U.S. EPA recognized the importance of cost-effectiveness in determining appropriate controls for NO_x emissions. In developing its rationale for determining the NO_x control measures that should be the basis for state NO_x budgets, the U.S. EPA focused on the average cost-effectiveness of controls. If additional NO_x emission reductions are proposed, the agency should also focus on NO_x controls that are proven to be the most cost-effective. The numerous waves of regulatory requirements have a cumulative impact on business vitality in the state. Given this impact combined with the questionable mandate for any reduction, it is imperative that cost impacts be given a high priority within the factors considered by IDEM to address this federal mandate. (MAP)(IMA)

Response: IDEM agrees that NO_x controls that accomplish necessary reductions and are the most cost-effective should be given the greatest consideration. IDEM is working with affected sources, U.S. EPA, appropriate state agencies and others, to develop cost estimates that are realistic and will provide a basis for the public to evaluate these important choices.

Comment: Ozone computer modeling will show that under some situations, usually in or near larger metropolitan areas, NO_x reductions may actually result in increased ozone

concentrations, due to NO_x scavenging. These ozone disbenefits will need to be closely examined when IDEM develops control strategies to respond to possible eight (8) hour nonattainment within Indiana. However, that will need to be addressed in a separate rulemaking. (IPL)

Response: IDEM agrees that in certain situations NO_x reductions can actually increase ozone and result in a disbenefit. It is unclear at this time whether the disbenefits contribute to ambient ozone exceedances and whether there are greater air quality benefits further downwind. The agency will be examining this situation when determining what control measures will be required to address any new nonattainment areas for the new standard.

Comment: According to IC 13-14-8-4, the air pollution control board shall also take into account the right of all persons to an environment sufficiently uncontaminated as not to be injurious to human, plant, animal, or aquatic life or to the reasonable enjoyment of life and property. The proposal to impose more stringent NO_x emission limits on electric utilities to reduce ozone formation does not come without hidden cost. The most effective, and most costly, NO_x retrofit control for a coal-fired boiler is selective catalytic reduction (SCR). SCR requires the use of large quantities of ammonia that is fed into the boiler gases to help convert NO_x to harmless gases. Ammonia, when present in large quantities as required for SCR use, can pose substantial risk to employees and the public. A NO_x reduction rule that imposes substantial NO_x reductions requiring SCR controls would effectively force these sources to install large bulk ammonia storage tanks associated with the SCR controls. Section 112(r) of the Clean Air Act concerning accidental release prevention regulates ammonia and requires sources storing ammonia over a certain amount to prepare and submit risk management plans.

The use of ammonia also impacts efforts to develop and promote ash reuse markets. An example of the impact concerns concrete. Ash reuse as an additive for concrete would be curtailed because the residual ammonia makes the ash unacceptable. The ammonia escapes as the concrete is being worked and creates unacceptable working conditions for the workers using the concrete. The loss of a market increases disposal costs and increases the use of virgin materials that had been replaced by ash. IDEM should consider all of the environmental and economic affects associated with imposing stringent NO_x emission limitations on electric utility generating units. (IPL)

Response: The use of SCRs and the associated ammonia storage and use are issues that IDEM will consider during the rulemaking. As noted by the commenter, Section 112(r) of the Clean Air Act does require that sources storing materials such as ammonia must take precautions against a release, including the development of a plan for handling an emergency situation. The issue of ash reuse is one (1) issue that IDEM will be discussing with affected sources at the scheduled meetings in an effort to develop a sound rule.

Comment: IDEM has been working with local groups around the state and, until recently, affected source categories in an effort to craft a plan that will likely lead to the expeditious attainment of the new eight (8) hour ozone standard. IDEM should resume working with the source categories that will be impacted by this rulemaking as these groups have ideas on more efficient ways to implement an appropriate solution in this rulemaking. These efforts, along with the modeling work done by the Lake Michigan Air Directors Consortium, of which IDEM is a member, demonstrate that by resolving its own eight (8) hour ozone nonattainment areas, Indiana will more than adequately reduce its contribution to ozone transport. (AEP)

Response: The agency has scheduled regular public meetings to discuss the rulemaking with all affected or possibly affected sources, and will continue to discuss issues with any interested party.

Comment: The final federal rule imposes far-reaching responsibilities on states under a

compressed timetable, and there is considerable doubt about the ability of states to develop all the required program elements before the September 30, 1999 deadline. Given limited time and resources, states will focus on those minimum program elements that are necessary to ensure that their state implementation plan submissions are approved. Accordingly, the following recommendations are offered:

- The U.S. EPA should allow the state the full eighteen (18) months allowed to revise their state implementation plans.
- The U.S. EPA should follow notice and comment procedures when disapproving state implementation plans.
- The Section 126 petitions should be granted, and controls imposed, only following a notice and comment process culminating in state implementation plan disapproval
- Federally enforceable controls, whether through a federal implementation plan or the Section 126 petition process, should be imposed only after there has been a period of negotiation and dialogue with the affected state. (CIN)

Response: While these comments address legitimate issues of public concern, they are outside of the scope of this rulemaking.

Comment: We support IDEM's leadership in its participation in subregional air planning organizations and in the creation of local advisory groups to deal with ozone issues. Under a new program included under Sections 176A and 184 of the Clean Air Act as amended in 1990, Congress gave states the responsibility, acting through multi-state commissions, to decide whether or not to recommend that the U.S. EPA issue calls for state implementation plan (SIP) revisions to address interstate ozone transport. This concept should be used to deal with ozone nonattainment and transport issues. A framework should be based on both a combination of a collaborative multi-state ozone transport commission with a modeling effort involving the Lake Michigan states expanded to include at a minimum Ohio and Kentucky, with a monitoring and air quality planning process overseen by subregional and local community air quality advisory entities. There would be agreed upon criteria for evaluating the relative air quality and cost effectiveness of controls in upwind and downwind states, setting control targets for utilities and other source categories, and determining de minimis levels of ozone transport too low to warrant interstate controls versus local controls. (CIN)

Response: IDEM will continue to work with other states in the midwest region, including those named by the commenter on issues of common interest, while moving forward with the state rulemaking process in an expeditious manner.

Comment: We support full attainment of clean air standards, but policymakers must choose the most constructive, cost-effective, and flexible means of achieving this goal. A phased emission reduction strategy that provides for cost-effective and timely NO_x controls should be implemented as an alternative to the federal final rule. The implementation would be as follows:

- Implementation of control level of twenty-five hundredths (0.25) pound per million British thermal units for electrical generating units with a heat capacity greater than or equal to two hundred fifty million (250,000,000) British thermal units by the 2003 ozone season. This would address one (1) hour nonattainment needs and significant ozone transport.
- Additional utility reductions and local NO_x and VOC reductions, if needed, after proper designations of eight (8) hour nonattainment areas and distribution of U.S. EPA guidance and procedures for emission inventory development, approvable eight (8) hour attainment plans, and related rules. The utility reductions may be appropriate by 2005 and may be between twenty-five hundredths (0.25) and fifteen hundredths (0.15) pound per million British thermal units. The possible, additional reductions would be determined through a multi-state ozone transport commission and local stakeholder air quality assessment

process no later than July 1, 2001.

- The compliance deadlines for utilities in 2003 and 2005 could be extended for electrical reliability concerns.
- Supplemental reductions would be implemented no later than 2007 on local NO_x or VOC sources needed for attainment of the eight (8) hour standard.
- Due to the creation of a state-wide NO_x emissions budget for regional transport reductions, all supplemental NO_x and VOC emissions reductions would be implemented through a broad based NO_x and VOC cap-and-trade program. Separate trading programs could be established, but trading across sources would be allowed where appropriate. Administrative and monitoring responsibilities for subregional trading would be assumed by the U.S. EPA and states.
- The establishment of an orderly, phased set of deadlines for implementing progressively tighter emission limits would provide an orderly path and protect electric system reliability, encourage cost-effective compliance strategies, and allow creation of functioning trading markets. Early emission reductions would provide timely ozone benefits to those areas not attaining the one (1) hour standard and additional reductions needed to attain the eight (8) hour standard could be integrated with the air quality planning and implementation efforts that the new standard will require. (CIN)

Response: IDEM has articulated its goals for this rulemaking in this Response to Comments document as well as in many other forums. It is important to note, however, that the U.S. EPA has issued a final directive to the states that requires a different approach than the one articulated by the commenter. Although the U.S. EPA directive is now being legally challenged, all parties, including the Air Pollution Control Board, must consider the possible, or likely, implications of not complying with the federal directive.

Comment: Although states and industries face considerable risk if IDEM does not submit a state implementation plan revision by September 30, 1999, IDEM should not submit its state implementation plan revision until the Court's review of the U.S. EPA final rule is completed. Some states and affected sources have found the merits of the final federal rule to be illegal and petitioned the Courts for expedited review. Once the states have revised their regulations and had those regulations approved by the U.S. EPA, the requirements under the final federal rule would become state and federal law. In the event the final federal rule was found to be invalid by the Courts it would be extremely difficult to rescind the regulations. (CIN)

Response: IDEM believes that it is in the best interests of Indiana citizens and businesses that IDEM move forward with rulemaking expeditiously, while assuring that there are sufficient opportunities for public input. If the pending request for an extension of the submittal deadline is granted by the U.S. Court of Appeals, that will affect the rulemaking schedule. At this point, IDEM believes it is appropriate for the state to move along on a schedule that will avoid the imposition of a federal plan.

Comment: Indiana utilities are not significant contributors to nonattainment areas in the Northeast region. Ozone modeling using two (2) different methodologies shows clearly that the great preponderance of the ozone in most nonattainment areas is due to emissions from within the nonattainment area itself, the surrounding state, and immediately adjacent upwind states. The contribution to elevated ozone levels from distant states is trivial under severe ozone episode conditions. Utility NO_x reductions of approximately sixty-five percent (65%) combined with projected Clean Air Act controls would be sufficient to meet the one (1) hour standard for the remaining nonattainment areas in the midwest. The incremental benefits of controls called for in the final federal rule in distant areas with severe nonattainment problems is minuscule. The bulk of the Northeast Corridor will not meet the one (1) standard with the final federal rule controls

and will still need to implement local controls. (CIN)

Response: IDEM has stated its belief that Indiana's contribution to high levels of ozone at far downwind states is not as long range a phenomenon as some have concluded, but also that certain NO_x reductions will assist in attainment of the new eight (8) hour standard in Indiana. The reductions will also address ozone transport to areas within and near to Indiana.

Comment: A NO_x control cost study confirms that the controls required under the final federal rule would be approximately twice as much as the latest cost estimate in the U.S. EPA's supplemental notice of proposed rulemaking. The study also shows that, with a uniform emission limit, compliance flexibility would be minimal and trading would offer negligible opportunities to reduce compliance costs. (CIN)

Response: IDEM understands the concerns with the cost estimates provided by the U.S. EPA. The agency is attempting to gather its own cost information for the affected sources. IDEM is seeking to develop a rule that reduces NO_x emissions to an appropriate level and in a manner that optimizes flexibility and considers the costs of the controls needed to get to that level.

Comment: Judgements concerning the level of NO_x control necessary to address nonattainment of the eight (8) hour standard should not be made in a national rulemaking conducted before the state implementation plan process has begun. The state implementation plan mechanism in Section 110(k) of the Clean Air Act was never intended to apply before the U.S. EPA developed attainment guidance, as well as the state air quality planning and control process for a new eight (8) hour standard has even begun. (CIN)

Response: It is clear from recent monitoring data that a number of areas in Indiana have air that does not meet the ozone health standard. IDEM is working with those areas, and in this rulemaking, to address the needs of their communities.

Comment: IDEM should include a Clean Air Investment Fund endorsed in the President's July 16, 1997 directive on implementing the new ambient air quality standards and guaranteed NO_x allowance price in its NO_x budget trading rule. IDEM should set a guaranteed NO_x allowance price at two thousand dollars ($2,000) per ton in 1998 dollars with adjustments for inflation in later years. This cap would be well above the average per ton control costs estimated in the final federal rule, but would provide utilities with protection if control costs turn out to greatly exceed this estimate. (CIN)

Response: IDEM would be interested in discussing this proposal further with any interested parties, including possible mechanisms for assuring maximum price for allowances.

Comment: IDEM should implement a NO_x emission reduction program in a cost-effective, fair manner taking into account costs of control for the specific entities being regulated. The program should provide credit to utilities that elect to reduce NO_x emissions early. Under the acid rain program, Phase II facilities with Group 1 boilers were granted the opportunity to freeze NO_x emission limits until 2008, if the sources elected to comply with the Phase 1 limits by January 1, 1997 or three (3) years before the required compliance date. IDEM should give credit to early reductions to source that have expended significant amounts of money and resources to comply earlier than required and providing environmental benefits. (RPL)

Response: In the final federal rule, sources would be given credit for certain early reductions that occur during or after the 2000 ozone season. IDEM agrees that providing incentives for early reduction is good public policy and will continue to discuss this issue with interested parties.

<u>NO_x Sources To Be Regulated</u>

Comment: NO_x emissions play an important role in the formation of ozone and the healthfulness of the air that we breathe. All sources of NO_x emissions should be evaluated and the emissions reduced where it is feasible and cost effective to make the reductions. (LPC)

Response: IDEM is evaluating all sources of NO_x emissions and will be discussing alternative proposals with affected sources and interested parties at the public meetings that have been scheduled to discuss this rulemaking.

Comment: The NO_x emissions from portland cement plants are only a fraction of the total industrial NO_x emissions. The NO_x reduction strategy to respond to the federal rule must recognize that the reductions achieved by process industries, such as the portland cement industry, will have a very small effect in achieving this goal. (LPC)

Response: While the emissions from the portland cement industry may be relatively small when compared to the total NO_x emissions in Indiana, they are a significant category. Achieving reductions from a variety of sources will be necessary to realize significant NO_x reductions and ozone improvement.

Comment: In developing a plan for NO_x reductions, IDEM should fully consider the environmental gains that are being made and will continue to be made under existing U.S. EPA fuels programs as well as the new programs already slated to come on line. These programs will involve significant new costs for consumers and will create further storage and distribution issues. State imposition of additional fuel controls for NO_x reduction purposes would not be practical or cost effective. In the final federal rule, the U.S. EPA recognized the importance of cost-effectiveness in determining appropriate control measures. In developing its rationale for determining which NO_x control measures should be the basis for state budgets, the U.S. EPA focused on the average cost-effectiveness of controls. The recognition by the U.S. EPA that federal reformulated gasoline, like other fuel reformulations, are less cost-effective than other strategies, even if volatile organic compound benefits are considered, is supported. (IPC)(IPM)

Response: Additional fuel controls may ultimately be determined not to be appropriate for reducing regional NO_x emissions. However, fuel programs may be evaluated in connection with the work that IDEM is doing with the regional steering committees. Additional fuel controls may be considered for those areas that will need to implement additional local controls to meet the new eight (8) hour ozone standard.

Comment: IDEM should consider options for expanding the applicability for the NO_x budget trading program. The applicability threshold could be lowered for sources already in the core group, for example, lowering the threshold for electric generators from twenty-five (25) megawatts to fifteen (15) megawatts or the threshold for industrial boilers from two hundred fifty million (250,000,000) British thermal units per hour to one hundred fifty million (150,000,000) British thermal units per hour. The applicability could be expanded to include additional source categories beyond the sources identified by the U.S. EPA. The applicability could also be expanded by allowing individual sources to opt in to the program. The additional sources would have to be able to monitor and report NO_x emissions using continuous emissions monitors (CEMS) or approved monitoring protocols. There may be concerns about the costs for smaller sources to install CEMS or the ability to make reductions as cost effectively as larger sources. However, monitoring protocols may be used to estimate emissions, these additional sources do contribute to the state's NO_x emissions, and smaller sources may emit NO_x at a higher rate than larger sources and size alone should not be the determining criteria. The applicability could be limited by excluding sources with a low enforceable NO_x limit of twenty-five (25) per ozone season. (HE)

Response: During the course of the rulemaking, IDEM will be considering additional

sources of NO_x emissions that should be included in the emissions reduction program and trading program, but there may be issues concerning streamlined U.S. EPA approval if additional source categories are included in the trading program beyond the categories included in the final federal rule. The final federal rule does include provisions that would allow other sources to opt-in to the trading program and IDEM is proposing to include these provisions. However, the additional sources would have to be able to meet any of the requirements of the trading program concerning monitoring, and the costs associated with the monitoring, as well as the ability to perform the monitoring, will have to be evaluated before a determination is made to include any additional sources.

Comment: If IDEM were to choose to impose less stringent NO_x emission rates on electric utilities, then other NO_x reductions must be made elsewhere for the state to comply with the U.S. EPA NO_x emissions cap. The establishment of a statewide enhanced inspection and maintenance program for all cars and trucks over four (4) years old, based on model year, is appropriate. A statewide enhanced inspection and maintenance program would do the following:

- Provides equity for all Indiana residents.
- Achieves dramatic volatile organic compound (VOC) reductions. VOCs are a precursor to ozone and tend to be the limiting component in larger, urban areas.
- Achieves significant NO_x reductions, the other precursor to ozone formation.
- Results in substantial mobile source emission reductions without imposing state or local controls on fuels.
- Puts emission reduction controls on a mobile source category that is increasing in size, both in terms of the number of vehicles on the road, and the number of vehicle miles driven.

Stringent NO_x reductions for industry does not adequately address NO_x generation. It is understood ozone precursor emissions from mobile sources play an important role in ozone formation.

In the NO_x SIP call, the U.S. EPA notes that the Ozone Transport Assessment Group (OTAG) called on states to consider expanding vehicle inspection and maintenance programs into urbanized areas. Inspection and maintenance programs are considered among the most cost-effective emission strategies available in the mobile source sector. IDEM may want to evaluate the implementation of inspection and maintenance programs as OTAG recommended and adjust the Indiana NO_x baseline emissions to reflect inspection and maintenance program implementation. (LPC)(IPL)(MAP)

Response: IDEM will be evaluating all sources of NO_x emissions to determine the appropriate mix of control measures that will reduce regional ozone transport and assist with the attainment of the eight (8) hour standard in Indiana. The NO_x reductions from vehicle inspection programs are relatively low, compared to the volatile organic compound (VOC) reductions. As noted by the commenter, these programs may be evaluated as part of a local ozone attainment plan.

Comment: The Ozone Transport Assessment Group Mobile Sources Committee spent over a year evaluating an array of potential controls on emissions of ozone precursors from mobile sources, including fuel controls. One (1) of the options for NO_x reductions associated with fuel controls examined by the ozone transport assessment group was gasoline sulfur reductions. The committee concluded that NO_x controls for mobile sources are not cost-effective relative to alternatives. The analyses show that fuel reformulation designed to reduce NO_x is very expensive and produces relatively small reductions. Due to the significant refinery equipment changes that would be necessary to produce this special fuel, it was agreed that the earliest that the program could be started would be 2004. The U.S. EPA is currently addressing the fuels

issue in a separate forum to determine emission levels for Tier 2 vehicles. It is the U.S. EPA's position that the Tier 2 process is the appropriate mechanism for resolving fuel emission issues and that it would be imprudent to start a state specific process with a different time line, given that any changes required of refiners are best made based on a single investment decision. The response by the U.S. EPA to include an examination of the sulfur issue in its effort to determine the need for Tier 2 vehicle emissions standards is supported. (IPC) (MAP)

Response: At this time, IDEM agrees that reducing sulfur concentrations in gasoline is best addressed at the federal level. Moreover, it is unclear that adopting state sulfur standards would contribute significantly to Indiana's NO_x compliance plan, given the U.S. EPA's schedule. U.S. EPA's current position is that a state can only use sulfur reduction as an element of its NO_x compliance plan until lower sulfur fuel is required by federal law. Fuel programs, other than sulfur reduction, may be evaluated on the local level in response to the need to provide additional controls to attain the eight (8) hour ozone standard.

Comment: No additional regulation of new or expanding sources of nitrogen oxides is warranted. The U.S. EPA recently revised the new source performance standards for certain utility steam generating units and industrial or commercial boilers. The new source performance standard limits are at least as stringent as the U.S. EPA's assumed control levels that were found to be practical and cost effective in the federal final rule, and in the case of industrial boilers more stringent. In addition, the U.S. EPA utilized growth assumptions in its analysis, so additional control measures do not need to be applied to new or modified NO_x sources. (ELC)

Response: IDEM agrees that the NO_x budget in the final federal rule accounts for growth of new and existing sources and that new source performance standards and other existing construction permit requirements will assure that new sources have low emissions. Allowances for these sources may be obtained through other reductions, trading, or some type of set aside pool. The determination of whether or not to require future controls on NO_x sources is outside the scope of this rulemaking.

Comment: The U.S. EPA has included two (2) process units in the non-utility NO_x source inventory that may not be able to reduce NO_x emissions. The units are fluid catalytic cracking units where gasoline is produced. These units are not traditional NO_x combustion units that burn fossil fuels. The NO_x reduction technologies for these units are not feasible, do not produce appreciable reductions, or are not cost-effective. (APP)

Response: The U.S. EPA has recognized some inaccuracies with the inventory data. IDEM will continue to work with sources to evaluate reasonable controls to reduce NO_x emissions.

Comment: The U.S. EPA concluded in the final federal rule that larger NO_x combustion sources, fossil fuel-fired NO_x sources serving electric generators with a nameplate capacity greater than twenty-five (25) megawatts, combustion turbines, or combined cycle units with a maximum design heat input greater than two hundred fifty million (250,000,000) British thermal units per hour, can cost effectively comply with a mass emissions limit using reasonably available technology and can use continuous emission monitoring systems. The U.S. EPA also concluded that sources serving electric generators with a nameplate capacity equal to or less than twenty-five (25) megawatts are not in a position to meet these requirements and that requiring these units to be controlled would not add any significant data to aid a state in determining whether it is meeting the NO_x emissions limits. IDEM should adopt the criteria established by the U.S. EPA and should not require smaller sources to meet the same limitations and requirements that have been established for much larger sources. (CLP)

Response: While the U.S. EPA did not include smaller sources in the model NO_x budget

trading program, it did not mandate that large sources are the only ones required to reduce NO_x emissions. In fact, the U.S. EPA stated in the final federal rule that it was up to the individual states to determine those sources that would be required to reduce emissions. While IDEM is evaluating all sources of NO_x emissions, it is also sensitive to cost issues and will consider cost-effectiveness and the feasibility of implementation for any additional sources or source categories that may be included under this rulemaking.

Comment: Municipal utilities that may be regulated under the final federal rule are small, local businesses with limited revenues that suffer diseconomies of scale when faced with technology-forcing or other stringent emissions control requirements. Given the public power role in providing a competitive alternative to private utility companies and the responsiveness of municipal systems to community values, including environmental protection, IDEM should consider the role of public power systems in the emerging competitive utility industry, address the particular needs and concerns of municipal systems, and avoid placing these systems at a competitive disadvantage. The diseconomy of scale will result in a financial burden and may cause retirement of selected units. The retirement of existing smaller units may result in losses of available capacity for summer peaking operations resulting in a loss of system reliability and the loss of reliability may be exacerbated by the loss of available generation capability as new technologies are installed during unit outages. IDEM can address the concerns of municipal utilities in the following manner:

- Exempt utility units under seventy-five (75) megawatts in capacity from NO_x emission controls under the new rules to control emissions of nitrogen oxides.
- Take action to avoid any disproportionate impact on smaller-sized utility units that are not eligible for the seventy-five (75) megawatt exemption, by providing regulatory flexibility and incentives, including adopting a NO_x cap-and-trade program that meets the needs of the smaller units. (IMPA)

Response: IDEM will be working with affected sources and interested parties over the next several months to determine those sources that will be subject to emissions reductions. The final federal rule included utility sources greater than twenty-five (25) megawatts in capacity and to provide an exemption for sources under seventy-five (75) megawatts would require additional reductions from other sources or source categories. The final federal rule included a model trading program that may be used in this rulemaking and IDEM is working with interested parties to develop a trading program for use by sources required to reduce NO_x emissions.

<u>Emissions Trading Programs</u>

Comment: The proposed NO_x trading program contemplates an annual reallocation of allowances three (3) years in advance of the applicable ozone season. IDEM should consider allocating NO_x allowances for more than one (1) ozone season, three (3) years in advance. A source's allocations may change from year to year with this proposed methodology. Uncertainty over allocation amounts and availability may make sources decide to install controls rather than participating in a trading market, even though purchasing allowances may be more cost-effective. Certainty in having allowances into the future will provide predictability for sources in compliance planning and build confidence in the market, and to optimize market certainty and viability, allocations should be made for the longest possible period. Allowances should be allocated in blocks of at least five (5) seasons, three (3) years in advance. This will provide an eight (8) year compliance planning horizon and yet provide opportunities for adjustments if new budget levels are established in the future. As an alternative, allocations should be for a period of ten (10) years, with a new source set-aside to cover emissions for new sources of NO_x. The new sources would receive sufficient allowances to cover actual emissions during the first three (3) years, and

would receive allowances based on the same methodology as existing sources thereafter. (HE)(CIN)

Response: IDEM is working with various affected sources to develop an emissions trading program that will be available for sources subject to the emissions reductions. Allocation methodology is just one (1) trading program element that IDEM expects to develop with the input from the affected sources.

Comment: NO_x allowance allocations should be based on heat input data. Heat input data is an easily understood metric and the data is readily available. Output-based allocations may be considered in the future, however, CEMS and monitoring protocols would need to be developed prior to implementing an output-based allowance allocation system and would require a recalculation and redistribution of all of the NO_x budgets. In addition, non-NO_x emitting sources would receive an unneeded windfall of allowances, while fossil fuel-fired sources would be required to make reductions that could dramatically exceed those anticipated in the final federal rule. (HE)(CIN)

Response: IDEM agrees that heat input data is readily available and widely understood. While the final federal rule does allow some flexibility in the allowance allocation methodology, IDEM believes that the rule should be based on information that can be gathered easily and that is familiar to all parties.

Comment: IDEM should consider adopting an allocation methodology that uses emission rate limits other than the default values provided by the U.S. EPA in the final federal rule. By expanding applicability, IDEM could increase the limits above the default values of fifteen hundredths (0.15) pound per million British thermal units for electric generating units and seventeen hundredths (0.17) pound per million British thermal units for large non-electric generating units. This would create more opportunity for sources to over control to generate emission reduction credits and thus stimulate market activity and lower the overall cost of compliance. (HE)

Response: IDEM will be working with the regulated community and interested parties to develop a sound trading program that assists with compliance and provides flexibility and a viable market.

Comment: IDEM should not establish an allowance set aside for new sources and should allow the market place to work. New sources can obtain allowances through the NO_x budget trading program. This has proven to be successful with the acid rain program and will stimulate market activity. A new, regulated source requiring the legal authority to emit NO_x would have to obtain sufficient allowances from the market to cover its ozone season emissions. The price of allowances would help the new source to determine if additional facility NO_x controls are the better option or are market allowances more cost effective. (HE)(IPL)

Response: The agency has received comments from various sources that the model trading program and the stringent reductions required will not provide for a viable trading market. Concerns about the ability of sources to over control to generate reduction credits have also been received. IDEM is concerned that without some provision for new sources there may not be allocations available, but this is an element of the trading program that IDEM will be discussing with affected sources.

Comment: IDEM should not allocate a portion of its trading program budget to promote energy efficiency and renewable projects. Other incentives, external to the NO_x trading program, may be used to promote implementation of energy efficiency and renewable projects. (HE)

Response: The promotion of efficiency and renewable projects will be discussed with

affected sources during public meetings to develop a NO_x emissions trading program.

Comment: IDEM should allow one-for-one allowance trading without restriction within a multi-state trading area. In order to maximize the compliance cost reduction potential afforded by a NO_x budget trading program, maximum flexibility is needed. The agency should not try to restrict allowance trades among affected sources. (HE)

Response: IDEM agrees that a NO_x budget trading program should be available to assist with the reduction of compliance costs and that trading programs are most effective in reducing emissions when they are simple and have relatively few constraints. It is important to assure, however, that a trading program will not result in negative air quality impacts for Indiana citizens. IDEM will continue to evaluate this issue and welcomes input from any interested parties on this point.

Comment: IDEM should allow broad trading of emission reductions between utility sources and within utility systems to the extent that it does not have an adverse impact on attainment. In order to implement the second part of this concern, impacts on attainment, it may be necessary to allow trading of reductions below some level that would be established by modeling done in support of this rulemaking. Using modeling in this fashion, IDEM could fashion a practical rule that will allow maximum flexibility to the regulated community, while preserving the necessary localized reductions that will lead to attainment with the ozone ambient air quality standard. Attainment with the ozone standard should be the ultimate goal of this rulemaking. (AEP)

Response: IDEM agrees that emissions trading should be allowed as long as local air quality is not adversely impacted and will be working with affected sources to develop a trading program that assists the regulated community and protects local air quality.

Comment: Efforts to build an emissions credit trading program not only for NO_x, but also for all of the criteria pollutants is strongly supported. Such a mechanism will help Indiana progress more quickly toward our state environmental goals by utilizing the power of the free market. The development and operation of a market system will encourage early reductions of NO_x and other pollutants and will assist sources targeted for NO_x reductions in meeting those requirements. An effective emissions trading program that creates economic incentives and market-based approaches will assist all types of regulated sources in meeting reduction requirements in current and future nonattainment areas. When developing the affected NO_x source list to be included in the trading program, those sources already equipped with best available control technology and those sources where NO_x reductions are not technically feasible should be excluded. An emission trading program should have a mechanism for interstate trading given the ozone transport phenomenom. IDEM should adopt a NO_x budget trading program as part of its strategy for achieving the reductions required under the NO_x SIP call. The trading program can be established by incorporating the model trading rule under 40 CFR 96 by reference or adopting state rules that mirror the model trading rule with variations and omissions in the areas of applicability, NO_x allowance allocation methodology, and early reduction credit methodology. (IMA)(IPC)(APP)(HE)

Response: While emissions trading programs for other pollutants may be considered for future rulemaking, the focus of this rulemaking is the reduction of NO_x emissions. The agency will be working with the regulated community to develop a trading program and one (1) of the options to be considered is the federal model trading program or variations of the model program.

Comment: The compliance supplement pool included in the final federal rule is needlessly restrictive and complex and will not provide utilities needing extensions with a vehicle to delay

installation of controls where circumstances warrant. IDEM should eliminate the limitation on the number of early reduction credits that can be generated. By doing so, IDEM will encourage sources to use the generation of early reduction credits as a prominent feature of their compliance strategy and will stimulate the market by creating additional allowances for potential trading. IDEM should create a limited allowance pool reserved solely for compliance extensions and allocate these allowances among affected units on a pro rata basis, so that all affected systems have the same ability to defer compliance deadlines for selected units in order to maximize system reliability. Under this approach, sources that do not need allowances for compliance extensions could sell these allowances to sources who do, allowing a greater role for market forces in addressing reliability concerns. IDEM should allow credit for early reduction and deferred compliance and the credits should be distributed on a pro rated basis and not first come, first serve. The final federal rule establishes a compliance supplement pool that can be used for early reduction credits or deferred compliance, or both. If the pool is oversubscribed, the use of a pro rated basis of distribution will allow applicants to receive an equitable portion of the allowances. (HE)(CIN)

Response: In areas where IDEM has discretion under the final federal rule, IDEM will work with interested parties to evaluate alternative approaches. How to manage the compliance supplement pool is one (1) these areas.

Comment: The proposed NO_x budget trading rule permits unlimited banking of allowances, but includes flow control provisions to prevent emissions prospectively from exceeding acceptable levels. If banked allowances may be subject to a significant discount shortly before the ozone season in which they will be used, sources will have an incentive to simply control emissions at their own facilities rather than participate in the market and take the risk that sufficient allowances will be unavailable to meet emission limits in future years. IDEM should either eliminate the flow control provisions or utilize a less draconian offset ratio than the two (2) to one (1) ratio in the final federal rule. (CIN)

Response: The flow control mechanism is a critical element of the federal model trading program and it does not appear that states have discretion to eliminate or change U.S. EPA's flow control provisions.

<u>Energy Reliability Issues</u>

Comment: In the first notice, IDEM requested comments about how the rule should address power reliability questions. The greatest risk of power reliability in the final federal rule results from the imposition of too stringent of NO_x emission limits in too short of a time. Such a regulatory program forces too many electric generating units to be out of service in the spring and fall months, non-peak months, to accommodate the retrofit of NO_x control technologies. There are three (3) obvious solutions to the reliability problem:

- Make the emission limit less draconian so less retrofit controls are necessary, thereby decreasing the number of units that have to be taken out of service.
- Extend the deadline for achieving the NO_x emission limitations achieving the same effect on the number of units that have to be out of service at one time.
- A combination of less stringent emission limits and deadline extension.

As such, it becomes clear that if IDEM decides that a less stringent emission limit for electric utilities is appropriate, given costs and benefits issues, then it helps address the reliability questions.

The final federal rule included a compliance supplement pool that is a step in the right direction to address the reliability problem, but there is no indication that it is adequate. A study looked at the effect of extending the compliance deadline to May 1, 2005 and the results showed

that the risk would be substantially reduced, but not eliminated. The compliance supplement pool would only have the effect of extending the compliance deadline to May 1, 2004 and, as such, would not be sufficient to reduce the reliability risks.

Finally, to the extent that NO_x emission reductions are imposed on emission sources other than electric generating units, these actions would have no direct affect on power reliability. (IPL)

Response: IDEM is concerned with the reliability issue and is committed to working with affected sources to determine the appropriate level of control that is needed to address Indiana's air quality and reducing any ozone transport. It is not clear that IDEM has the ability to extend the compliance date. However, IDEM will be working with interested parties to determine if other sources of NO_x can be identified and targeted for additional emissions reductions.

Comment: The air pollution control board should examine the reliability issues concerning this rulemaking and the environmental implications of rule-induced blackouts or brownouts. Electricity interruptions could lead to increased use of smaller, more polluting alternatives, such as woodstoves or portable generators. The interruptions could also affect pollution control equipment, such as waste water treatment facilities. The interruptions could also impact the "... reasonable enjoyment of life and property". Indiana residents could find useless many of the everyday appliances used in the home, and other facets of their lives could be impacted. Possible widespread outages attributable to environmental regulation needs to be considered.

The implementation of the enormous volume of controls by the 2003 deadline is infeasible and would threaten the reliability of power supplies in the midwest and other regions. Sixty-eight percent (68%) of the generating units in the Ozone Transport Assessment Group region would be required to install selective catalytic reduction (SCR) and, for some sources, SCR installation will take three (3) to four (4) years on average and substantial delays are possible. The multiple construction outages required for installation of controls are likely to strain reserve electrical capacity to the point where widespread service interruptions are unavoidable, if unrealistic compliance dates and a non-viable trading program exists. Even with very optimistic growth factors there could be brownouts and rolling blackouts for close to five hundred (500) hours during each year that controls are being retrofitted. (CIN)(IPL)

Response: IDEM agrees that the reliability issue is important and will be working with individuals and affected sources to try to find alternatives that will reduce concerns about reliability.

<u>Early Emission Reduction Incentives</u>

Comment: IDEM requested comments concerning what incentives can be provided for early reductions. One (1) form of incentive can be to eliminate dis-incentives, such as administrative delays for the installation of NO_x control technologies. IDEM should review and eliminate these delays whether in the form of construction permits, operating permit revisions, or other approvals by IDEM or local agencies.

If other incentives are envisioned, they must be true incentives. There are substantial capital and operation and maintenance costs for the installation and subsequent operation of NO_x controls. Operating costs will be very high due to consumptive use of ammonia or urea and due to the rapid poisoning of the catalyst due to high sulfur fuel use. As such, any operational use of the equipment prior to the May 1, 2003 compliance deadline will need to overcome the economic detriment to the owners and operators. (IPL)

Response: IDEM agrees that the elimination of dis-incentives and the development of true incentives are important. During the scheduled meetings for discussion of rule development, IDEM will be seeking additional information concerning incentives and dis-incentives that should be evaluated. IDEM will work with affected sources, the U.S. EPA, and the public to assure that

preconstruction reviews are at an appropriate level and do not create unwarranted delays in the installation of pollution control technology.

Seasonal Approaches

Comment: IDEM requested comment on how seasonal approaches can be used. As the clearly stated purpose of the rule is to reduce ozone and ozone is only produced during the so-called ozone season, May 1 through September 30, there is clearly no purpose under the rule to impose extra NO_x emission limits beyond the ozone season. Given the substantial operation and maintenance costs imposed by these NO_x retrofit technologies, there would be no ozone reduction benefits achieved for the costs. (IPL)

Response: IDEM agrees. The purpose of this rulemaking is to identify NO_x reductions that are necessary to assist with the attainment of the new ozone standard in Indiana and address any ozone transport that may be present. Since the formation of ozone is dependent on certain weather conditions that generally only occur in the summer months, this is when the reductions will be critical.

REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Mailed comments should be addressed to:

#98-235(APCB)[NO_x Reductions]
Janet McCabe
Assistant Commissioner
Office of Air Management
Indiana Department of Environmental Management
P.O. Box 6015
Indianapolis, Indiana 46206-6015.

Hand delivered comments will be accepted by the receptionist on duty at the tenth floor reception desk, Office of Air Management, 100 North Senate Avenue, Indianapolis, Indiana, Monday through Friday between 8:15 a.m. and 4:45 p.m.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-2342, Monday through Friday between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rules Development Section at (317) 233-0430.

COMMENT PERIOD DEADLINE

Comments must be postmarked, hand delivered, or faxed by June 1, 1999.

Additional information regarding this action may be obtained by calling (800) 451-6027 (in Indiana), press 0 and ask for Roger Letterman, Rules Development Section, Office of Air Management, (or extension 2-8342) or dial (317) 232-8342.